

Listing of Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (currently amended) A safety knock-type writing instrument, comprising:

a barrel ~~(10)~~ having a cartridge ~~(50)~~ therein;

a gear unit ~~(30)~~ provided on an exterior of the barrel ~~(10)~~ and rotatably seated in a clip ~~(20)~~; and

a knock unit ~~(60)~~ positioned in the barrel ~~(10)~~, and including first and second protrusions ~~(61, 62)~~ to engage with the gear unit ~~(30)~~,

wherein the cartridge ~~(50)~~ is retracted into the barrel when the first protrusion ~~(61)~~ of the knock unit ~~(60)~~ disengages from the gear unit ~~(30)~~.

2. (currently amended) The safety knock-type writing instrument according to claim 1, wherein the clip ~~(20)~~ comprises:

a gear seat ~~(40)~~ to rotatably seat the gear unit ~~(30)~~ therein.

3. (currently amended) The safety knock-type writing instrument according to claim 1, wherein the gear unit ~~(30)~~ comprises:

a guide groove ~~(32)~~ to axially guide the first protrusion ~~(61)~~, the guide groove having predetermined depth and length to disengage from the first protrusion ~~(61)~~ when the gear unit ~~(30)~~ rotates;

a rotation guide part ~~(33)~~ to be spirally guided by the first protrusion ~~(61)~~;

a first protrusion seat ~~(34)~~ to seat the first protrusion ~~(61)~~ therein; and

a second protrusion seat ~~(35)~~ to seat the second protrusion ~~(62)~~ thereon and to be spirally guided by the second protrusion ~~(62)~~.

4. (currently amended) A safety knock-type writing instrument, comprising:

a barrel ~~(10)~~ having a cartridge ~~(50)~~ therein;

a half gear unit ~~(300)~~ provided on an exterior of the barrel ~~(10)~~ and rotatably seated in a clip ~~(20)~~; and

a knock unit ~~(60)~~ positioned in the barrel ~~(10)~~, and including first and second protrusions ~~(61, 62)~~ to engage with the half gear unit ~~(300)~~;

wherein the cartridge ~~(50)~~ is retracted into the barrel when the first protrusion ~~(61)~~ of the knock unit ~~(60)~~ disengages from the half gear unit ~~(300)~~; and

the half gear unit ~~(300)~~ rotates in a rotating direction ~~(R)~~ and an opposite rotational direction (Q), in response to reciprocating motion of the knock unit ~~(60)~~ in a pushing direction (F) and a releasing direction (R).

5. (currently amended) The safety knock-type writing instrument according to claim 4, wherein the barrel ~~(10)~~ is formed so that a barrel body ~~(10a)~~ is integrated with a tip holder ~~(12)~~ into a single structure, and comprises linear guide slits ~~(16, 17)~~ having a wide opening and a narrow opening, respectively, the linear guide slits having a predetermined length and being opened at a predetermined end so that the first and second protrusions ~~(61, 62)~~ axially slide along the linear guide slits while being projected out of the linear guide slits.

6. (currently amended) The safety knock-type writing instrument according to claim 4, wherein the barrel ~~(10)~~ is coupled to a ring-shaped part of the clip ~~(20)~~ by engagement of a first threaded part ~~(18)~~ of the barrel ~~(10)~~ with a second threaded part ~~(28)~~ of the clip ~~(20)~~.

7. (currently amended) The safety knock-type writing instrument according to claim 4, wherein the barrel ~~(10)~~ has a first tapered contact surface ~~(19)~~ at a position around the first threaded part ~~(18)~~, and the ring-shaped part of the clip ~~(20)~~ has a second tapered contact surface ~~(29)~~ to be in frictional contact with the first tapered contact surface ~~(19)~~, the first and second tapered contact surfaces ~~(19, 29)~~ providing a relatively large contact area compared to a flat surface contact manner, thus increasing a coupling force when the first threaded part ~~(18)~~ of the barrel ~~(10)~~ having the guide slits ~~(16, 17)~~ engages with the second threaded part ~~(28)~~ of the clip ~~(20)~~.

8. (currently amended) The safety knock-type writing instrument according to claim 4, wherein the half gear unit ~~(300)~~ has a shape of an eccentric gear which rotates about a central axis thereof, and comprises:

a first rotation guide part ~~(310)~~ providing a spirally inclined slide surface so that the first protrusion ~~(61)~~ of the knock unit ~~(60)~~ slides along the first rotation guide part to rotate the half gear unit within a predetermined angular range;

a first inclined groove part ~~(320)~~ provided at a lower end of an inclined surface of the first rotation guide part ~~(310)~~ to form a linearly inclined slide surface and a flat

surface in a direction of an axis of rotating shafts ~~(390a, 390b)~~, the first inclined groove part serving as a locking step using a height difference;

a first protrusion seat ~~(330)~~ provided at an end of the flat surface of the first inclined groove part ~~(320)~~ to have a height different from the first inclined groove part ~~(320)~~, the first protrusion seat having a spirally inclined slide surface and a sharp corner, thus seating and stopping the first protrusion ~~(61)~~ when the cartridge ~~(50)~~ is extended;

a second rotation guide part ~~(340)~~ provided above the sharp corner of the first protrusion seat ~~(330)~~, and having a toothed shape with a spirally inclined slide surface;

a second inclined groove part ~~(350)~~ which is the equal to the first inclined groove part ~~(320)~~, but has a linear inclined slide surface and a flat surface in an opposite direction to the first inclined groove part;

a third rotation guide part ~~(360)~~ having a slide surface so that the second protrusion ~~(62)~~ of the knock unit ~~(60)~~ slides along the third rotation guide part ~~(360)~~;

a second protrusion seat ~~(370)~~ to function as a stopper of the second protrusion ~~(62)~~; and

first and second sidewalls ~~(380a, 380b)~~ provided outside the first and second inclined groove parts ~~(320, 350)~~ to be perpendicular to the first and second inclined groove parts, the first and second sidewalls guiding and restraining the rotation of the first protrusion within the predetermined angular range.